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CHRISTIE, PARKER & HALE, LLP			POLLACK, MELVIN H	
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/944,905	BARONE ET AL.			
Office Action Summary	Examin r	Art Unit			
	Melvin H Pollack	2145			
The MAILING DATE of this communication apperiod for Reply	pears on the cover shelt with the c	orrespond nce address			
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tim ly within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	ely filed swill be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 31 A	August 2001.				
· <u>_</u> · · · · · · · · · · · · · · · · · · ·	s action is non-final.				
	·				
Disposition of Claims					
4) ☐ Claim(s) 1-35 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-35 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.				
Application Papers					
9)☐ The specification is objected to by the Examine 10)☑ The drawing(s) filed on 31 August 2001 is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the Examine 11.	a)⊠ accepted or b)⊡ objected t drawing(s) be held in abeyance. See tion is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)					
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 	4) ☐ Interview Summary (Paper No(s)/Mail Da 5) ☐ Notice of Informal Pa 6) ☑ Other: <u>see attached</u>	te atent Application (PTO-152)			

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1, 5-8, 10, 15, 17-21, 26, 29, 32, 34, 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Douceur et al. (6,401,126).
- 3. For claim 1, Douceur teaches a system (abstract) for interacting (col. 1, line 1 col. 10, line 10) with end user terminals over a first communications network (Fig. 5, #32), the system comprising:
 - a. A plurality of servers (Fig. 5, #24) coupled to receive communication (col. 1, lines 25-40) from the end user terminals over the first communications network (Fig. 5, #32);
 - b. An interface disposed between the plurality of servers and end user terminals (Fig. 5, #34), the interface being operative to receive requests from the end user terminals and to distribute the requests to the plurality of servers (col. 1, lines 54-60);
 - c. A second communication network (Fig. 5, #26) coupled to provide communication between the servers in the plurality of servers (col. 1, lines 60-65);
 - d. A first computer program segment (Fig. 5, #62) resident in at least one of the plurality of servers (col. 3, lines 20-25) wherein said program receives a request from an

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end user terminal, processes the request, and broadcasts data regarding the processed request to the other servers (col. 4, lines 20-40; col. 7, line 65 – col. 8, line 30); and

- e. A second computer program segment resident in at least one of the plurality of servers wherein the said program stores data broadcast from at least one other server (col. 3, lines 10-25).
- 4. Further regarding claim 1, Douceur teaches an improvement on the distributed systems using thrifty scheduling policies (col. 1, lines 25-27) and that simply adds, rather than changes, the system drawn in the prior art (col. 10, line 65 col. 11, line 3). Therefore, the embodiment described within the prior art is implicitly included in the embodiment described in the detailed description, and thus this rejection is a 102.
- 5. For claim 5, Douceur teaches that the end user terminals comprise ITV receivers, and wherein the requests from the end user terminals are requests from the ITV receivers to retrieve and transmit interactive content to the ITV receivers (col. 2, lines 3-10).
- 6. For claim 6, Douceur teaches a database for permanent storage of the data relating to processed requests (Fig. 5, #28).
- 7. For claim 7, Douceur teaches that the database is coupled to the second communications network (Fig. 5, #28).
- 8. For claim 8, Douceur teaches that the interface disposed between the plurality of servers and end user terminals further includes means for routing incoming requests to the respective servers (col. 11, lines 40-50).
- 9. For claim 10, Douceur teaches that the routing means comprises a load balancing system (col. 11, lines 40-50).

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10. Claim 15 is drawn to a method that effectively describes the activities undertaken by the hardware system as drawn in claim 1. It is well known in the art that the underlying method of a given system is functionally equivalent to said system. Therefore, since claim 1 is rejected, then claim 15 is also rejected for the reasons above. A teaching regarding the method/system equivalence is available upon request.

- 11. Claim 17 is drawn to a method that effectively describes the activities undertaken by the hardware system as drawn in claim 10. It is well known in the art that the underlying method of a given system is functionally equivalent to said system. Therefore, since claim 10 is rejected, then claim 17 is also rejected for the reasons above. A teaching regarding the method/system equivalence is available upon request.
- 12. For claim 18, Douceur teaches that the load balancing system distributes requests to the plurality of servers (col. 11, lines 5-10).
- 13. For claim 19, Douceur teaches allocating the request uses a round robin allocation to distribute the load over the plurality of servers (col. 6, lines 50-60).
- 14. For claim 20, Douceur teaches forwarding the request further comprises performing a load analysis to distribute the incoming requests over the plurality of servers (col. 7, lines 30-45).
- 15. Claim 21 is drawn to a method that effectively describes the activities undertaken by the hardware system as drawn in claim 5. It is well known in the art that the underlying method of a given system is functionally equivalent to said system. Therefore, since claim 5 is rejected, then claim 21 is also rejected for the reasons above. A teaching regarding the method/system equivalence is available upon request.

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16. Claim 26 is drawn to the limitations in claims 1 and 8. Therefore, since claims 1 and 8 are rejected, claim 26 is also rejected for the reasons above.

- 17. Claim 29 is drawn to the limitations in claim 6. Therefore, since claim 6 is rejected, claim 29 is also rejected for the reasons above.
- 18. Claim 32 is drawn to a method that effectively describes the activities undertaken by the hardware system as drawn in claim 1. It is well known in the art that the underlying method of a given system is functionally equivalent to said system. Therefore, since claim 1 is rejected, then claim 32 is also rejected for the reasons above. A teaching regarding the method/system equivalence is available upon request.
- 19. For claim 34, Douceur teaches that forwarding the request is done in a random manner to distribute the load over the plurality of servers (col. 6, lines 55-60).
- 20. Claim 35 is drawn to the limitations in claim 5. Therefore, since claim 5 is rejected, claim 35 is also rejected for the reasons above.

Claim Rejections - 35 USC § 103

- 21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 2, 3, 16, 27, 28, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Douceur as applied to claims 1, 15, 26, 32 above, and further in view of Hugenberg et al. (6,714,545).

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23. For claim 2, Douceur does not expressly disclose that the first program segment broadcasts data over the second communication network to the second program segment. Hugenberg teaches a method (abstract) of providing data services to an array of end users from an array of servers (col. 1, line 1 – col. 3, line 15) that uses the second communication segment in the method described above (Fig. 1, #18). At the time the invention was made, one of ordinary skill in the art would have used the second network as mentioned above in order to allow for more efficient data striping of Douceur, and also to enable Pay-Per-View services (col. 2, lines 60-62).

- 24. For claim 3, Douceur does not expressly disclose that the second communications network comprises an Ethernet network. Hugenberg teaches this limitation (col. 4, lines 5-6). At the time the invention was made, one of ordinary skill in the art would have used an Ethernet network to accommodate known systems (col. 1, line 48).
- 25. For claim 16, Douceur does not expressly disclose that transmitting data is performed over a private network. Hugenberg teaches this limitation (col. 7, lines 23-33). At the time the invention was made, one of ordinary skill in the art would have added private networks to Douceur in order to provide VDSL features (col. 2, lines 40-65).
- 26. Claims 27 and 28 are drawn to the limitations in claims 2 and 5, respectively. Therefore, since claims 2 and 5 are rejected, claims 27 and 28 are also rejected for the reasons above.
- 27. Claim 33 is drawn to a method that effectively describes the activities undertaken by the hardware system as drawn in claim 16. It is well known in the art that the underlying method of a given system is functionally equivalent to said system. Therefore, since claim 16 is rejected,

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then claim 33 is also rejected for the reasons above. A teaching regarding the method/system equivalence is available upon request.

- 28. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Douceur and Hugenberg as applied to claim 3 above, and further in view of Hoguta et al. (6,725,303).
- 29. For claim 4, Douceur and Hugenberg do not expressly disclose that the second communications network comprises a gigabit Ethernet network. Hoguta teaches a method (abstract) of providing data services (col. 1, line 1 col. 4, line 45) using a gigabit Ethernet network (col. 1, lines 20-22).
- 30. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Douceur as applied to claims 1, 8 above, and further in view of Koperda et al. (5,790,806).
- For claim 9, Douceur teaches that the routing means comprises the Domain Name Server function of the Internet. Koperda teaches a method (abstract) of providing a cable data network for providing information (col. 1, line 1 col. 3, line 8) in which a DNS function is used for routing (col. 5, line 50 col. 6, line 60). At the time the invention was made, one of ordinary skill in the art would have provided DNS techniques to Douceur in order to build Douceur on legacy IP addressing systems (col. 6, lines 10-11).
- 32. Claims 11, 12, 14, 22-25, 30, 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Douceur and Hugenberg as applied to claims 1, 2, 15, 26 above, and further in view of Hoarty (5,883,661).

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33. For claim 11, Douceur and Hugenberg do not expressly disclose a process coupled to the second communications network, wherein the process is programmed to monitor the network for instances of specific transactions. Hoarty teaches a method (abstract) of performing interactive television with a plurality of servers and a plurality of clients (col. 1, line 1 – col. 3, line 50) in which the network is monitored for specific transactions (col. 6, lines 5-7). At the time the invention was made, one of ordinary skill in the art would have added transaction monitoring to

Douceur and Hugenberg in order to bolster interactive capabilities (col. 1, lines 30-35).

- 34. For claim 12, Douceur and Hugenberg do not expressly disclose that one of the processes comprises a threshold monitoring process coupled to a content encoder, wherein the threshold monitoring process is programmed to process data transmitted over the second communications network, determine that a threshold has been exceeded, and to transmit a corresponding notification to the content encoder. Hoarty teaches a content encoder (col. 4, lines 35-45) in which a threshold monitoring process coupled to a content encoder (Figs. 1 and 4), wherein the threshold monitoring process is programmed to process data transmitted over the second communications network (col. 4, line 50 col. 5, line 50), determine that a threshold has been exceeded (col. 6, lines 5-15), and to transmit a corresponding notification to the content encoder (Figs. 5 and 6). At the time the invention was made, one of ordinary skill in the art would have added transaction monitoring to Douceur and Hugenberg in order to bolster interactive capabilities (col. 1, lines 30-35).
- 35. For claim 14, Douceur and Hugenberg do not expressly disclose that the process comprises a transaction processing process. Hoarty teaches this limitation (col. 10, lines 33-40). At the time the invention was made, one of ordinary skill in the art would have added transaction

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monitoring to Douceur and Hugenberg in order to bolster interactive capabilities (col. 1, lines 30-35).

- 36. Claims 22 and 23 are drawn to a method that effectively describes the activities undertaken by the hardware system as drawn in claims 11 and 12, respectively. It is well known in the art that the underlying method of a given system is functionally equivalent to said system. Therefore, since claims 11 and 12 are rejected, then claims 22 and 23 are also rejected for the reasons above. A teaching regarding the method/system equivalence is available upon request.
- 37. For claim 24, Douceur and Hugenberg do not expressly disclose that detecting a data threshold comprises detecting a certain number of users. Hoarty teaches this limitation (col. 5, lines 30-50). At the time the invention was made, one of ordinary skill in the art would have added this feature to Douceur in order to better partition services (col. 5, line 45).
- 38. For claim 25, Douceur and Hugenberg do not expressly disclose that encoding the indication of detecting the threshold comprises placing an indication of detecting the threshold within a video signal to be provided to an ITV receiver. Hoarty teaches this limitation
- 39. Claims 30 and 31 are drawn to the limitations in claims 11 and 12, respectively.

 Therefore, since claims 11 and 12 are rejected, claims 30 and 31 are also rejected for the reasons above.
- 40. Claim 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Douceur, Hugenberg, and Hoarty as applied to claim 12 above, and further in view of Plaza Fernandez et al. (6,377,992).

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41. For claim 13, Douceur, Hugenberg, and Hoarty do not expressly disclose a frame relay line connected to the threshold monitoring process and the content encoder to transmit information there between. Plaza Fernandez teaches a method (abstract) of improving physical communications (col. 1, line 1 – col. 6, line 5) in which frame relay lines are used in such a manner (col. 7, line 36). At the time the invention was made, one of ordinary skill in the art would have added frame relay lines to Douceur in order to combine communications links for efficiency purposes (col. 3, lines 5-10).

Conclusion

42. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin H Pollack whose telephone number is (571) 272-3887. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on (571) 272-3896. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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